

Serial No. 10/006,492

REMARKS AND DISCUSSION

In view of the following discussion, Applicants submit that claims 72-75, 77-78, 80-108, 111-112, and 114-140 are directed to statutory subject matter under the provisions of 35 U.S.C. §101, and they comply with the requirements of 35 U.S.C. §112. Claims 76, 79, 109-110, 113 and 141 have been cancelled without prejudice and new claim 142 has been added. Thus, Applicants believe that claims 72-75, 77-78, 80-108, 111-112, 114-140, and 142 are now in condition for allowance.

I. REJECTION OF CLAIMS 72-141 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

The Examiner has rejected claims 72-141 under 35 U.S.C. §112, first paragraph.

Responsive to the Examiner, Applicants have amended the independent claims to recite the Hidden Markov Model as suggested by the Examiner. This amendment to the claims find support at least on page 3 of the Specification in the Summary of the Invention. Applicants submit that claims 72-75, 77-78, 80-108, 111-112, and 114-140 fully satisfy the requirements of 35 U.S.C. §112 and are patentable thereunder.

II. REJECTIONS UNDER 35 U.S.C. § 101

The Examiner has rejected claims 72-141 under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Responsive to the Examiner, Applicants have amended the independent claims to recite the limitation that "identifying the biopolymer sequences based on the state of similarity or the state of dissimilarity with the set of known sequences". As explained in the Applicants' specification, knowing the similarity of biopolymer sequences to a set of known sequences are very informative as to the "imputed function" based upon the classification of the set of known sequences (See Applicants' specification, e.g., Background; Page 13, 3rd and 4th paragraphs). In other words, the likelihood that a biopolymer sequence is similar or dissimilar to a set of known sequences provides an important advantage of predicting the "imputed function" of the biopolymer sequence. It is submitted that this amendment to the independent claims will overcome the present

Serial No. 10/006,492

§101 rejection.

III. NEW CLAIM

The Examiner rejected claim 141 for failing to comply with the format of a computer readable medium claim.

Responsive to the Examiner, the Applicants have canceled claim 141 without prejudice and added new claim 142. It is submitted that new claim 142 complies with the format of a computer readable medium claim.

Conclusion

Thus, Applicants submit that all of these claims now fully satisfy the requirements of 35 U.S.C. §101 and §112. Consequently, the Applicants believe that all the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there remains unresolved issues, prior the issuance of a final action in any of the claims now pending in the application, it is requested that the Examiner grant Applicants a telephone interview by contacting the undersigned at (732) 530-9404 so that such issues are resolved as expeditiously as possible.

If these papers are not considered timely filed by the United States Patent and Trademark Office, or if any additional fees are required, kindly charge that fee to Deposit Account No. 20-0782.

Respectfully submitted,

Date: 7/22/04


Kin-Wah Tong
Attorney for Applicants
Reg. No. 39,400
(732) 530-9404

Moser, Patterson & Sheridan, LLP
595 Shrewsbury Avenue
Shrewsbury, New Jersey 07702